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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,499	02/27/2002	Yasukazu Iwasaki	040356-0432	3415
22428	7590	09/09/2005	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			RESTIFO, JEFFREY J	
			ART UNIT	PAPER NUMBER
			3618	

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*Ku*

**Office Action Summary**

Application No.

10/069,499

Applicant(s)

IWASAKI, YASUKAZU

Examiner

Jeffrey J. Restifo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/24/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/14/05 has been entered.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 16 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Iwase (US 6,255,008 B1).

Iwase discloses an electric vehicle comprising a fuel cell system 36 for generating power, a motor 46 for driving a vehicle, a controller 20, a battery 40 for storing power from said fuel cell, an accelerator pedal sensor 22 for measuring a time average (or differential of) electrical load required for running the vehicle, and a state-of-

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charge (SOC) sensor 42, the SOC sensor measures the charge of the battery, and the controller selectively switches on the fuel cell in response the predetermined values of both the measured electrical load and SOC values being above and/or below a predetermined values, such as 60% SOC (col. 9, line 47), as shown in figures 1-3 and recited in columns 4-10.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwase (US 6,255,008 A) and in further view of Takechi et al. (US 5,154,986 A).

Iwase discloses an electric vehicle comprising a fuel cell system 36 for generating power, a motor 46 for driving a vehicle, a controller 20, a battery 40 for storing power from said fuel cell, an accelerator pedal sensor 22 for measuring a time average (or differential of) electrical load required for running the vehicle, and a state-of-charge (SOC) sensor 42, the SOC sensor measures the charge of the battery, and the controller selectively switches on the fuel cell in response the predetermined values of both the measured electrical load and SOC values being above and/or below a predetermined values, such as 60% SOC (col. 9, line 47), as shown in figures 1-3 and recited in columns 4-10. Iwase does not disclose stopping the fuel cell in an idle

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operation. Takechi et al. does disclose a fuel cell controller, which stops operation in an idle mode, as shown in figure 3. It would have been obvious to one having ordinary skill in the art at the time of the invention to have stopped operation of the fuel cell of Iwase when the vehicle is in idle mode, as taught by Takechi et al. in order to save fuel consumption of the fuel cell.

With respect to claims 5 and 6, the fuel cell system of Iwase would work during idle and stopped conditions because the battery would still be supplying power to the vehicle.

### ***Response to Arguments***

5. The applicant did not submit any arguments concerning claims 16 and 17, which were unamended, therefore the rejection stands. Claims 1-15 have new grounds of rejection due the added limitation.

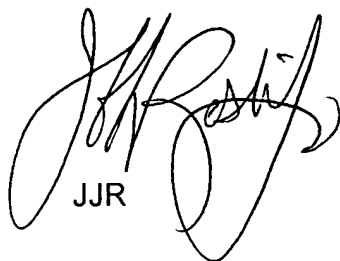
### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey J. Restifo whose telephone number is (571) 272-6697. The examiner can normally be reached on M-F (10:00-6:00), alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher P. Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JJR

Jeffrey J. Restifo  
Examiner  
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